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Cite this as: *BMJ* 2021;372:n411<http://dx.doi.org/10.1136/bmj.n411>

Published: 4 March 2021

COVID-19

Covid-19 has made the obesity epidemic worse, but failed to ignite enough action

The evidence is clear that obesity is a risk factor for severe covid-19 disease and death. **Meera Senthilingam** asks what this increased urgency has done to boost action against this other epidemic

Meera Senthilingam *freelance journalist*

Studies in the United States have shown that having a BMI over 30—the threshold that defines obesity—increases the risk of being admitted to hospital with covid-19 by 113%, of being admitted to intensive care by 74%, and of dying by 48%. Public Health England reported similar numbers for mortality, with the risk of death from covid-19 increasing by 90% in people with a BMI over 40.¹

This is irrespective of age, as being overweight or obese is associated with worse outcomes in younger populations as well. People under 60 years old with a BMI between 30 and 34 are twice as likely to be admitted to intensive care with covid-19 than those with a lower BMI.² A report from the World Obesity Federation published on 4 March 2021 showed further trends, emphasising that death rates from covid-19 have been ten times higher in countries where more than half of the population is obese.³ And as the world becomes optimistic about vaccines helping us return to some form of normality, a preprint published in February reports that obesity might correlate with a lower immune response to the Pfizer-BioNTech covid-19 vaccine, although the study was small and is yet to be peer reviewed.⁴ These worrying developments have brought much needed attention to the world's obesity epidemic.

"The fact it's chronic is the issue," says Steve Gortmaker, professor of the practice of health sociology at the Harvard TH Chan School of Public Health. "Nowadays health services are just asking people to maintain their weight, not even lose it." Gortmaker first published about the US obesity burden in 1987. More than two decades of government programmes have had some impact, but far from enough.

Before the pandemic, around 2.8 million people worldwide died each year as a result of being overweight, from conditions that stem from it including heart disease, stroke, and diabetes. Now covid-19 is added to the list. But are countries doing more to tackle this burden? Many experts say no—or at least not as much as one might expect.

Two decades of slow progress

Countries with the greatest obesity burdens, such as the US, Mexico, and most of the Pacific Islands, have been trying to tackle the problem for decades. Programmes focused on improving school meals, healthier eating campaigns, encouraging more active lifestyles, and the taxation of products such as sugary

drinks have had some effect: Mexico saw a 6.8% decrease in the chances of people consuming medium to high volumes of sugary drinks just three years after a sugar tax was implemented in 2014.⁵ Yet obesity rates remain high among both adults and children, with one in three adults being obese in 2018 and one in 10 children in 2018-19.

Governments in the Pacific implemented the "Healthy Island" vision over 20 years ago to tackle many aspects of health, including obesity, by targeting school meals and education around healthy eating, as well as improving trade deals to increase the quality and variety of food entering the islands. But the region continues to have the highest obesity rates in the world—over 55% of the population of Samoa is obese according to the World Obesity Federation.

Now Mexico has recorded one of the highest case counts of covid-19 in the world.⁶ The US, where obesity rates are also notably high, has the highest number of covid-19 infections and deaths in the world, and the United Kingdom, where obesity rates are the highest in Europe, has a disproportionate death rate for covid-19 compared with other countries.

This should be a wake-up call to tackle the obesity burden, and some countries were motivated to act in 2020. The Department of Health and Social Care for England announced a new obesity strategy in July, emphasising the increased risks associated with covid-19. "Excess weight is one of the few modifiable factors for covid-19 and so supporting people to achieve a healthier weight will be crucial to keeping people fit and well as we move forward," the strategy states.⁷ It outlines seven measures to target obesity, including the expansion of weight management services available through the NHS, legislation requiring food businesses to add calorie labelling to their foods, and a ban on the advertising of foods high in fat, salt, or sugar on television before 9 pm. In December, the strategy added restrictions on promoting unhealthy foods at checkouts, entrances, and the ends of aisles in supermarkets and other food stores, stating that "location promotions often lead to 'pester power' from children."⁸

Mexico has introduced front of package labelling regulations on unhealthy foods to help people improve their diets. Some of its states have also banned sales of junk food to children, and others have removed salt shakers from tables in restaurants in a bid to reduce salt being added to meals. India's Food Safety and Standards Authority has banned the

sale and marketing of unhealthy foods (high in fat or sugar) in school canteens or other educational institutions, as well as the sale of such foods within 50 m of school gates.⁹

But some experts think that current efforts don't get to the core of the problem. Christina Marriott, chief executive of the Royal Society of Public Health said of the UK strategy, "It does not outline how the root causes of obesity will be addressed. Without this, it is difficult to see how we can disrupt our current trajectory."

Where the power lies

That root cause, Marriott says, is poverty and inequity, which have also magnified the effects of covid-19 in some populations. "Children in the most deprived areas are now more than twice as likely to be obese than those in the least deprived areas, and the gap is widening," says Marriott. "When the government asks individuals to change their behaviour we see some benefit for the better off, while the worse off—whose environment and circumstances can make lifestyle change far harder to achieve—are typically left ever further behind."

This trend can be seen in low and middle income countries in recent years, where obesity rates have risen as unhealthy foods have become more available and affordable. "You can spend a few dollars and eat a few hundred calories in a few minutes," says Gortmaker. "And food marketing encourages us to eat every moment of the day."

Truly tackling obesity also means reducing the power of the food and beverage industry in opposing legislation that affects them. Gortmaker says that such changes remain politically difficult owing to the power of the industry, with measures such as taxation or bans on advertising mostly introduced at the state level in the US as a result.

The industry's grip has only tightened during the covid-19 pandemic. A report from the NCD Alliance (a civil society network aiming to control and prevent non-communicable diseases) published in September listed hundreds of ways the food and drink industry has used the pandemic to promote its products and capitalise on the situation—particularly alcohol, sugary drinks, and ultra processed food.¹⁰ This includes food packs and contributions that contain unhealthy products and promote brands, such as Heineken Russia, which donated meals to health workers alongside its energy drink, and FEMSA, which distributed unhealthy snacks and sugary drinks in deprived neighbourhoods in Mexico.¹⁰ Many fast food chains also offered free meals or products to health workers, the report states. *The BMJ* contacted Heineken and FEMSA for comment, but neither company responded.

"There are so many powerful economic interests at stake," says Lucy Westerman, policy and campaign manager for the NCD Alliance. "The way the industries are supported and encouraged is worrying . . . there needs to be a significant rethink about where the power lies."

Marriott says that efforts to tackle obesity "must be supported by a government unafraid to robustly stand up to industry" to implement the most effective interventions, such as taxes. The sugar tax introduced on soft drinks in the UK in 2016 resulted in a 28.8% reduction in the sugar content of drinks from its announcement to implementation, yet the new obesity strategy has omitted such measures on other unhealthy foods. It also missed the opportunity to focus on making healthy foods more affordable, Marriott says.

A window for change

Yet Westerman thinks that the pandemic has opened a window for new policies. "Covid-19 has been the wrecking ball, revealing how interconnected health conditions and the determinants of them are," she says. She thinks that authorities are now realising that if they continue to neglect chronic disease prevention, they risk undermining the health security of their populations in the future.

"There hasn't been a better opportunity in history to increase our efforts to ensure good nutrition and assume environmental health as an indivisible determinant of human health," said Jorge Alcocer Varela, Mexican secretary of health, at the World Health Assembly in May.

In the Pacific Islands, experts say the pandemic response has helped make the population healthier. Dyxon Hansell, health adviser for the World Health Organization's Samoa office, told *The BMJ* that lockdowns have led to people cooking at home more, resulting in healthier meals. Some island governments are also offering free online training on how to provide healthy food and drink in schools; healthy diets and recipes for home preparation; and online ordering of healthy food for delivery. With people being at home more, they are also being encouraged to grow more of their own food.

These are steps in the right direction, but they are far from being a quick fix. Experts think that truly tackling obesity requires a multifactorial approach across governments, including agriculture and transport departments as well as health. Ultimately, Gortmaker thinks that obesity needs attention from the top, not just state or local health departments. "So far, it's just not received that kind of attention," he says, and when it does "somebody comes in, starts up a programme and then leaves."

But this has long been the case, and if a global pandemic that has killed hundreds of thousands of people with the condition—and led to hospital admissions for many more—doesn't galvanise enough action, what will?

"We just can't miss this moment," says Westerman. "It's an opportunity for governments to make something slightly better out of a really horrible situation."

Provenance and peer review: Commissioned; not externally peer reviewed.

Competing interests: I have read and understood BMJ policy on declaration of interests and have no relevant interests to declare.

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